



Annual Meeting Scheduled For New York City

The American Nature Study Society will hold its fifty-third Annual Meeting in New York City, December 26-30 with headquarters in the Roosevelt Hotel. A record attendance is expected at the various sessions which will feature outstanding leaders in presenting papers, leading discussions and conducting field trips.

Dr. Ruth Hopson, President-elect has been working diligently to prepare the program which has involved extensive correspondence and many frustrations. Among the features will be a session on Nature Hobbies and Projects.

Details of the annual field trip are shaping into form. Charles Mohr has made arrangements to visit the Brooklyn Botanical Gardens. He is working with

Shirley Miller and they promise one of the best trips the ANSS has had for a long time.

Many eastern members and friends of the ANSS and a scattering from as far west as Oregon and California are expected to be in attendance at the Annual Banquet. At least eight past presidents will be on hand to greet new members and to renew old acquaintances. There is assurance for the presence of E. L. Palmer, "Cap'n Bill" Vinal, Malvina Trussell, Stanley B. Mulaik, Ruth E. Hopson, Charles E. Mohr, Edwin Way Teale, and Richard W. Westwood. If Roger Tory Peterson is not in parts of the world too far from New York City, he will be on hand, too. President Emery Will will be pleased to welcome each and every one.

Watch for the November Issue

In the December issue of the NEWS-LETTER a detailed program will be printed to give the membership an idea of what will be awaiting them when they arrive in New York City for the 53rd Annual Meeting. There will be a joint session of the teaching societies to discuss the subject of the use of OUTDOOR Laboratories. The SHOWING of KODACHROMES as an annual feature will be the attraction for the evening of Dec. 27.

PET NATURE PROJECTS and HOBBIES will offer some suggestions for everyone interested in various phases of Nature Study. There will not be a dull moment. We have heard that some from the far west who will have to be away from home at Christmas will get in to the big city to enjoy the Christmas festivities there.

RESERVE A ROOM

Members of ANSS planning to attend the meetings in New York should not delay in sending in a reservation for a room. The headquarters hotel is the Roosevelt with the following rates. Single room, \$8.50; Double bed, \$14.00; Twin Beds, \$15.00. These are flat rates for rooms with bath. If you wish to share a room indicate with whom. Send reservation to

AAAS Housing Bureau
90 East 42nd St.
New York 17, N. Y.

Indicate the type of reservation desired. Officers and board members might indicate their status. Other hotels which are being used by the AAAS are the Commodore, Biltmore, Belmont-Plaza, and the Waldorf-Astoria. Also indicate the date and time of arrival and departure.

Western Section Holds Meeting

Apparently the only active ANSS section is the Western which holds its meetings in June in connection with the Pacific Division of the AAAS. An excellent program was arranged which included a field trip. While the attendance was not large, it was an enthusiastic group which met at Eugene, Oregon.

The president of the section is Dr. Elmo Stevenson, president of Southern Oregon College at Ashland. Miss Catherine Dunlop of Eugene, Oregon is president-elect and Mrs. Frances Newsom of Eugene is the secretary-treasurer. Dr. Ruth Hopson has been retained as representative of the Western Section to the AAAS and the Western delegate to the annual meeting of ANSS in New York City.

New National Park Planned

There is a movement for the creation of a National Park from a portion of Great Salt Lake in Utah. The world wide fame of this lake warrants consideration for giving park status to a portion of it. Presently it is proposed to involve two islands — Freemont and Antelope Islands. By constructing several stretches of dikes to the east a fresh water impoundment can be made which would be an added attraction. Senator Frank E. Moss of Utah is currently exploring the feasibility of such a park.

Return Ballots Promptly

You will be receiving your ballots for the election of officers of ANSS very soon. If they have already arrived we hope you lost no time in indicating your choices for the various officers and returned the ballot to the Secretary who will have a count made by an impartial committee. Good luck to the nominees.

AMERICAN NATURE STUDY SOCIETY NEWS LETTER

Affiliated with
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The National Science Teachers Association
The American Association for the Advancement of Science
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Members Make the Society

Most people who work with national organizations find that membership is a critical problem to master. Most societies find that fifteen to twenty percent of their new members fail to renew their membership. It is also obvious in most successful societies that certain members who have learned of the philosophy of the society become a bulwark for the permanent membership. The loss each year comes largely from those who have not found themselves.

Clyde T. Reed as first vice-president is chairman of the membership committee. He has had the major job of sparking the various state and regional chairmen who are working for membership on the local level. Some energetic state chairmen have done fine service and are to be commended. Mildred Rulison who was elected treasurer last year was instrumental in enrolling the largest number of members during 1959. Who will be the best member getter for 1960?

Mildred Rulison suggests that every member of ANSS who made contacts with people during the summer write "Thank you" notes and to include suggestions of value of ANSS membership. Also include an invitation to visit New York at the annual meeting where you will be happy to see them. She also suggests that ANSS memberships make fine Christmas presents and that the society award a suitable recognition to the person who gets the greatest number of new memberships each year. This award could be made at the annual banquet.

Name Change Noted

We note that the National Audubon Society has changed the name of the Audubon Junior Club to Audubon Junior Program. We hope this change will answer an objection some had to the term *club* which for many teachers had the connotation of another extra curricular activity. Many ANSS members and others have found this program an excellent source of activity for junior groups. Our good member Shirley Miller directs this nationally known program which has served over a million girls and boys over the years, and has pointed a path for a better understanding of our American heritage of the out-of-doors.

Theodore Payne Foundation Established

Roland C. Ross, past president of the Western Section was largely instrumental in having established the Theodore Payne Foundation for Wild Flowers and Native Plants, Inc. This is a non-profit organization to perpetuate the native flora of California.

Some members will recall a field trip taken several years ago during a western section meeting which involved a visit to Mr. Payne's wildflower gardens. One of the objectives of the Foundation is "To demonstrate the use of native plants and wildflowers in landscaping home gardens, school grounds, public parks and freeways. Also their use in erosion control and water conservation."

BRIEFS

Miss Virginia H. Russell, one of our fine members, received an award of merit for her work in promoting conservation education. She had been one of the staff members of the National Wildlife Federation, and is now "free lancing" as a lecturer on conservation throughout the country.

* * *

Charles M. (Matty) Mattison who has been on our national programs recently retired from his long service with the US Forest Service. Matty will continue to lead a busy life since he was appointed by the American Forestry Association to direct a pilot study on how to produce a series of conservation teaching aids for the upper elementary grade teachers. He has been continued as the president of the Conservation Education Association which held its annual session last August at Oneonta, N.Y. with the ANSS president Emery L. Will as the local chairman.

* * *

Members in Illinois have expressed a concern over the future of the prairie chicken in that state. The encroachment of humans on the area which was the natural range for ages of this interesting bird is probably the major factor in its precarious condition.

* * *

Since the ANSS is meeting in New York it seems appropriate to call attention to the fact that the rose is the state flower and the eastern bluebird the state bird. At least five states have chosen the rose and four the bluebird. A complete listing of the state trees, flowers and birds may be obtained from the National Wildlife Federation, 1412 Sixteenth St. N.W., Washington 6, D. C.

* * *

Quite a number of states have Conservation Education Councils composed of individuals representing all of the major organizations and interests concerned with the field of natural resources. The latest such council was recently formed in New Mexico with George Worley of the University of New Mexico as the chairman. George Worley is the director of the Watershed Conservation Project which is supported by the Pack Forestry Foundation.

* * *

The S. Glidden Baldwin Family is half way through their world tour with plans to arrive home in January. In a letter from Dutch New Guinea they write about a trip to the interior. "We could get in and out of these mountains by air only for a few hours because of clouds over the 12-13000 feet mountains. We have brought out stone axes, bows and arrows, spears, native armor, dress

Nature Study TIPS

A Service of the American Nature Study Society

NEWS LETTER INSERT

SEPTEMBER, 1960

Stream Life

by CAROL SUSAN KESTLER

Wherever riffing streams tumble over rocky bottoms, wherever clear water sweeps over jagged falls, mayfly nymphs cling to jostled rocks — and live.

Wherever slow streams and quiet pools nurture rooted plants, wherever fresh-water flows lazily toward its mouth, dragonfly naiads silently stalk unwary prey.

Wherever similar aquatic environments exist over our country, similar animals and plants, adapted by evolution to cope with these environments, exist also.

Life in Fast Streams

Fast stream animals must fight constantly for their positions in life. They must either cling tightly to rocks, offering virtually no resistance to the powerful currents, or find more sheltered "underneath" places to hide. The water penny is so much flattened that as it clings to the undersides of rocks it looks more like a copper-colored stain than a beetle larva.

Stonefly nymphs are also flattened, and have a pair of strong claws on each leg with which to cling to rocky undersurfaces. When disturbed, they immediately scatter into the water, clambering for new places to hide.

Mayfly nymphs resemble stoneflies. Most find precarious roosts on top of alga-covered rocks, and use their rake-like jaws to scrape a livelihood from the stones that shelter them.

Powerful currents make hunting trips precarious for fast stream animals. Most creatures depend upon the current to bring food to them. *Hydropsyche*, a caddis fly larva, spins a net on a rock; facing upstream, it strains plankton from the current. *Macronema*, another caddis "worm," builds an ingenious rock trap. Most others of these larvae fasten tube-houses to the bottom, awaiting unwary creatures who pass within reach of their powerful jaws. They are so thoroughly adapted to fast water that they are unable to build their houses in slow currents,

even if all their other needs are provided for.

Tiny, black, wormlike blackfly larvae hold themselves fast with a caudal sucker, as they reach out to strain the water with fanlike brushes on their heads. Should they become detached, (a constant danger to all these animals), they will grab some nearby surface with a second sucker located near the mouth. When they travel, these larvae anchor themselves by a silken thread, assuring a path back home.

Although most fast stream inhabitants are immature insects, some snails, flatworms and leeches also dwell here. A few minnows and darters scuttle between the rocks, and one family of salamanders stalks the bottom. These Plethodontidae breathe through their skin, having neither gills nor lungs as adults. Their presence is testimony to the fact that riffly water is well oxygenated.

Rooted plants cannot survive in fast water, but diatoms and other algae are plentiful. These are at the base of all the food chains, supporting the zooplankton as well as most mayflies, stoneflies, and others.

Some food comes into the slow stream from other environments—washed down from banks, or from pools and tributaries where life is slower, and rooted plants can grow.

Life in Slow Streams

Let's look at the slow stream, where rooted plants as well as algae are such an important part of the habitat. They provide not only food and shelter, but oxygen as well. Here photosynthesis must do the job that riffing currents do in the fast stream.

Hunters thrive in slow waters. They can stalk their prey and strike with scissor-like jaws, like the dragonfly naiad or diving beetle. They can strike, and suck their prey like the upside-down back swimmer. They can strike and snap like the snapping turtle.

With no jostling currents to disturb

them here, many animals take advantage of the high surface tension of water. Mosquito larvae hang with only the openings of their anal air tubes above the surface. Hydras dangle upside down from the film. Snails and flatworms glide along its undersurface while water striders walk on top.

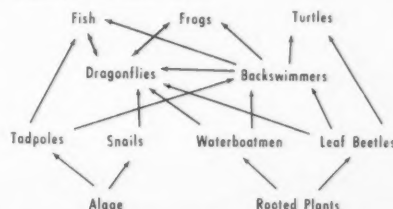
Every micro-environment is exploited in the slow stream. Stems are covered with snails and plant-eating worms, leaves are floating hatcheries for minute snail and insect eggs. Among the plantains, cattails, and arrowheads closest to shore, algae, and the tiny crustaceans which eat them, thrive.

In deeper water, where lily pads merge with *Elodea* and eel grass, sponges encircle stems, red water mites live under leaves, and tube-dwelling caddie "worms" cling to leaves and stems.

A scoop of bottom mud reveals hundreds of worms — the red *Tubifex* and the pale *Nais* among them. These scavengers on decaying organic matter are well adapted to a low oxygen supply.

Floating logs are ferry boats for frogs and turtles, and many fish and salamanders are among the hunters and hunted in the underwater jungle.

The struggle to stay alive in the slow stream is with one's neighbors, instead of the current. Every animal is fit food for another, and the unwary are short lived. The evolution that fitted the mayfly with its lightning jaws, fitted these animals for the rapid, hectic, specialized life in fresh water, fast and slow.



A Generalized Food Web. The arrows connect things that eat with those that get eaten.

Stream Life: Teacher - Student Activities

Any little stream in your neighborhood can begin your fascinating adventure into ecology. One class armed merely with kitchen strainers is a formidable army for surveying stream life. Books listed at the close of this insert will help you get started in identification and in the study or relationships. Although identification to species becomes important for advanced work, group names are quite sufficient to open vast ecological horizons.

The Food Supply

In addition to finding out about the adaptations and specializations of individual animals that you encounter, your group might begin to explore the energy relationships which underlie nature's balance. A count of the organisms at each nutritional level in your stream can be organized into a pyramid of numbers, graphic demonstrations of how food chains work (see illustration). Any basic ecology text would indicate other types of energy pyramids. A more detailed quantitative picture of "Who eats what" is the food web. (See Illustration).

Field Notes

As your students work in the field, it is essential that they take notes. These should briefly record the environment, the weather, and the techniques used as well as "finds." Higgins Eternal or Engrossing ink, (usable in most fountain pens), on high rag content paper, provides permanent, waterproof notes. Each specimen should be listed by number in the notes, with a brief account of exactly where it was found and what it was doing. For example: #14 — Stonefly — Under rock, in fast current, midstream. Holding on — tried to escape when rock turned. #29 — Dragonfly — Clinging to plant stem just below surface. Feeding on tadpole.

Collections

Specimens which cannot be identified in the field may be brought back either live or preserved. Living invertebrates and fish can be transported in jars of water, along with the plants on which they were found.

Adult salamanders and frogs are best carried wrapped in plenty of wet moss.

Pliofilm bags are good containers. You might set up a natural aquarium to study some animals more fully at close range.

Invertebrates and plants can be preserved in the field in vials of 70% alcohol; rubbing alcohol will do. Vertebrates should be placed in 10% formalin. These should be collected only with very good reason, since they are a conspicuous part of the area, and generally far fewer in number than other animals. Labels, giving the field number of each specimen, should be placed inside the collection bottles.

Kitchen strainer dip nets can be improved by tying them to handles of various lengths. They may be lined with cheesecloth to produce a finer mesh.

Plankton Study

One very interesting activity is the collection and study of plankton. A plankton net concentrates the organisms for study. To make your net, obtain a piece of woven nylon or silk bolting cloth 15 inches by 1 yard. Cut this diagonally, and sew the pieces together, forming an acute triangle. Join the outer sides to form a cone. The apex of the cone is cut, and a lipped vial secured in this opening with a rubber band. Sew the top of your net to a metal ring, 9 inches in diameter, secure to this three pieces of light chain or rope, placed equidistantly around the ring, and anchor the loose ends together.

Your net may be dragged through the water, attached to a line for a plankton survey; or a measured amount of water may be poured through it for a plankton count, and relative numbers of organisms determined.

White enamel trays prove very useful for examining specimens in the field, and for sorting bottom sediments. Hand lenses, forceps, and eyedroppers are also handy equipment.

Since the fast stream contains so many immature insects, one fascinating activity involves raising these to adulthood. Fast water forms are very difficult to keep in aquaria, so Dr. James G. Needham devised a way to raise them as captives in their own streams. The first reference describes his method.

You are now launched on a study both

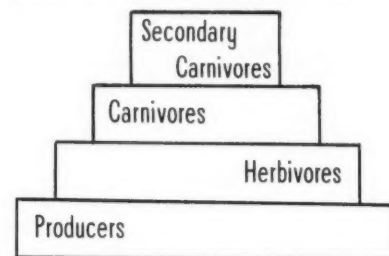
exciting and interesting. Ingenuity and experience will suggest many new experiments and techniques as well as many ways of applying your new found knowledge to your studies of evolution, and adaptation, and life processes.



Making Your Plankton Net. 1. Cut piece 1 yard by 15 inches on the diagonal. 2. Sew pieces together forming triangle (dotted line indicates seam). 3. Sew outer edges together; cut off point so vial can be inserted. 4. Net attached to wire with vial in place; now attach chains to rim for handle.

Books To Help You

Pleasant reading as well as an excellent introduction and guide to fresh water natural history is Ann Morgan's *Fieldbook of Ponds and Streams* (Putnam's). *The Life of Inland Waters* by Needham and Lloyd (Comstock) is a fascinating, somewhat more detailed treatment of the subject. Simple, illustrated keys to help identify your catch are available in *A Guide to the Study of Fresh Water Biology* by Needham and Needham (American Viewpoint Society). William Hillcourt's *Fieldbook of Nature Activities* (Putnam's) is loaded with ideas for making simple equipment and suggests numerous interesting activities.



A Generalized Energy Pyramid. The horizontal extent of each bar indicates the number of organisms at that level.

For further information about this subject or about the Society, write to the Editor of Nature Study Tips: Prof. Richard B. Fischer, Nature Study Division, Rural Education Department, Stone Hall, Cornell University, Ithaca, New York.

Good Reading

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There has been a deluge of excellent books dealing with the complex of nature study-conservation-ecology. No attempt will be made to list all of even the very best. One in particular which is a classic and which in years to come will become a collector's item is *This is the American Earth* by Ansel Adams and Nancy Newhall. This book is primarily a collection of superb photographs of scenes depicting the best of what makes the America which appeals to those interested in our National Parks, seashores lakes, forests, and streams. Published by the Sierra Club, Mills Tower, San Francisco, California. 90 p. \$15. 1960.

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Edwin Way Teale (Pres. ANSS 1948) has a new book which members will find interesting and useful. *Adventures in Nature* is the best from Teale and consists of thirty-one selections from six of his earlier works. 305 p. \$4.00. Dodd Mead and Co. 432 Fourth Ave., New York 16.

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Things to do in Science and Conservation by Byron Ashbaugh and Muriel Beuschlein provides many suggestions for projects through which a school program would be vitalized. Interstate Printers and Publishers, Inc., Danville, Illinois, 163 p. \$2.50.

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Group Two of the Faeron Science Education Series is off the press. These fine books are edited by two ANSS members Matthew F. Vessel and Herbert H. Wong. Five authorities were involved in writing these. Two are members Arthur Nelson (V.P. ANSS) San Francisco State College who wrote *Trees*, and Grace Maddux, Cleveland Public Schools wrote *Seeds*. These are excellent small books at 75¢ obtainable from Faeron Publishers, 2263 Union Street, San Francisco.

* * *

Wildlife in Danger by Ivah Green. Coward McCann, Inc., New York. 123 p. \$3.50. This book lists twenty nine extinct or endangered birds and mammals, and devotes a chapter to each discussing the basic requirements for survival. The book is written in a style suitable for school age children and adults.

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(strings) and have pictures and sound recordings on tape."

We can look forward to some fine entertainment with stories, pictures and tape recordings for a future ANSS program.

The Wild Mammals of Missouri, by Charles W. Schwartz and Elizabeth R. Schwartz. University of Missouri Press and Missouri Conservation Commission, \$5.95; 341 pp. illus. This book produced by a husband and wife team would be a fine addition to any natural history library.

A Field Guide to the Birds of Texas, by Roger Tory Peterson. Commissioned by the Texas Game and Fish Commission and printed by Houghton Mifflin Co., Boston. 1960. 304 pp. Illustrated. Indexed. This is the first state to have its own field book by Peterson. The excellent color and black and white illustrations include every bird in a state which has a mingling of Mexican and northern birds. \$3.00 from Texas Fish and Game Comm. Walton Bldg., Austin Texas. Limited edition at this price.

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Science for Children and Teachers by Herbert Zim. Published in 1953 but still serves its purpose today. Bull. 91. Assoc. for Childhod Edu. Int'l 1200 15th St. N. W. Washington 5, D. C.

* * *

ROCKS AND MINERALS, A Golden Nature Guide, Herbert S. Zim and Paul Shaffer, Illustrated by Raymond Perlman, Simon and Schuster, N. Y., 1957, 160 Pages, Paper — \$1.00; Deluxe — \$2.50.

Here is a field book for the amateur, a very practical guide to rocks, minerals, and gems with 400 attractive illustrations in color, including charts and diagrams. The book tells how to collect, study and identify minerals, discusses the metallic, non-metallic, gem and rock-forming minerals, the three types of rocks — igneous, metamorphic and sedimentary, and discusses gems and gem cutting.

There is a general discussion on the earth and its rocks and on rocks in daily use. A good bibliography and list of museums exhibiting interesting rocks and minerals further enhance this useful book.

* * *

WORLDS OF NATURE. Rutherford Platt and the Staff of the Walt Disney Studio, Simon and Schuster, N. Y., 1957, 176 pages, \$4.95.

Although there is no substitute for seeing live animals in their native environment, these remarkable photographs, (273 of them in natural color), come close to giving one a sense of looking at the animals themselves. The interesting narrative introduces us to seven "worlds" of animal life telling us something of the lives of the creatures living in them. The Arctic, mountain, prairie, swamp, even Africa and a variety of small areas

in North America are included. Here is a delightful gift book for any age.

* * *

READING THE LANDSCAPE. May Theilgaard Watts, Macmillan Co., N. Y., 1957, 230 pages, \$4.75.

Many of us respond to the beauties and magnificence of the landscape but few can so interpret its features as to read its continued story of events. This book provides a guide to the view from your livingroom, the nearby countryside, far away vacation scenery. Each chapter takes up a different type of place enabling one to discover the Earth's adventures, past and present, that have created the scene.

Mrs. Watts is a born teacher and a good artist. Her many attractive sketches and her lively narrative style have made a very entertaining book, packed with interesting facts presented in a way that will make them stay with you. Mrs. Watts, Naturalist at The Morton Arboretum at Lisle, Illinois, has drawn on a rich background of outdoor experiences both in exploring the wild and in introducing people to its wonders.

Multiple Use

Recently President Eisenhower signed the act directing the national forests to be administered for multiple and sustained yield. Time will tell whether this act was the result of emotional clatter from both sides regarding the controversial Wilderness Bill, or that it was conceived in wisdom. In any case, multiple use and sustained yield has been clarified by an act of congress. This legislation opens the way for the Forest Service to exercise its powers effectively against the sometimes insidious pressures of single use proponents such as the water, lumber, cattle, mineral and the commercial or other recreational interests.

To better understand what the job of the Forest Service is, every member of ANSS should read "Operation Multiple Use-Program for the National Forests." These are available from the local Forest Service offices or from the national office in Washington, D. C.

CONSERVATION NEWS of the National Wildlife Federation states that "The new law provides that the national forests shall be administered for outdoor recreation, range, timber, water, wildlife and fish, but gives no statutory priority to one resource over another. This is the first time that all the basic renewable resources including recreation, wildlife and grazing were given legislative recognition in a single statute."

See You In New York

On Man's Inherent Nature

Man's escape to lakes, streams, forests, mountains and the seashore is an answer to an inner urge to be what evolution has made man, namely a creature of the good earth. Thomas Burke in *The Beauty of England* (From the Scrap Book, Sixth Edition, 1940) makes some observations which apply closely to America.

"I wish it were possible for every child to spend its first ten years close to the soil. If I had had children of my own I would, at any inconvenience to myself, have moved into the country, and not alone for considerations of their physical health. I would have had them brought up in the country so that for the rest of their lives they should have had a mental background of fields and trees and wide skies and the smell of earth. Upon this basic culture all that they might later acquire would, I know, have grown more readily and more richly than it grows in the town child. The town child has no roots. He has quick brains, sharp movements, keen understanding of men; but he is an unfinished product. To have no country background to your memories is equal to having no education. Lover of towns as I am, I realize that I owe a debt to my early country life. Again and again, in hours of disquiet, I have gone back in spirit to those country days of childhood, and have always found something in the recollected smell of the earth and the picture of my old village, to rest upon."

Camp Fire Girls Conservation Project

The success of the Camp Fire Girls *Conservation Project* which will be concluded next March points to a build up of interest which will be carried on for a long time to come. Mrs. Nan Harman Mickels who promotes nature and conservation activities in the Division of Program Services can feel proud of the *Conservation Project*.

During 1959 three publications were prepared for the Camp Fire Girls and distributed nationally. These were *Soil and Water Conservation Activities*; *Suggestions for Camp Fire Leaders*; and *Let's Adopt a Tree*.

A report of their *Results in Terms of Service* is a report of excellent planning, hard work by many people, and remarkably fine and satisfying results. Information on their precedural techniques and activities might be obtained from the Camp Fire Girls, Inc., 16 East 48th St., New York 17, N. Y.

Help Available

ANSS members everywhere are usually the people sought out for helps in building nature programs for classroom, scout troop or other youth groups. This service of ANSS members at the local level some times becomes extensive and it can have much of its burden reduced if a program prepared by the National Audubon Society is recommended for adoption by the group seeking help. This is the Audubon Junior Program.

The new 1960-61 program has some down to earth concrete suggestions for activities. The Audubon Junior Scrap Book has a section "What I Discover in my Back Yard, What I Discover at my School, What I Discover on a Trip and What I Discover in a Park."

There is a project sheet on the discoveries in the back yard which helps develop an orientation of a child in his local surroundings in terms of the plant and animal life, and of his place with respect to the sun and of the seasons.

The Audubon Leaders' Guide published for Audubon Junior Leaders is an aid in conducting meaningful nature and conservation programs for boys and girls.

Our good member, Shirley Miller has charge of this program. For information write National Audubon Society, 1130 Fifth Avenue, New York 28, N. Y.

Water Pollution Conference Scheduled

At the request of President Eisenhower, the National Conference on Water Pollution was called by Arthur S. Fleming, Secretary of Health, Education and Welfare for Dec. 12, 13 and 14 at Washington D. C. This conference provides conservationists with a unique opportunity to speak out for clean water as a basis for wholesome outdoor recreation.

Members of the ANSS will see presented compelling information which should gain the attention of government leaders, health authorities, newspapers and the public. This should enable the launching of a vigorous national program for cleaning up America's water.

NATURE STUDY TIPS AVAILABLE

Copies of Nature Study Tips are available for promotion of membership. State Chairmen are urged to write to Beth Schultz for copies to distribute to prospects. Beth also has available for members copies of the ANSS directory for \$1.00. Write to Dr. Beth Schultz, Western Michigan University, Kalamazoo, Michigan.

Your editor would appreciate a reaction from the membership regarding this issue of the NEWSLETTER and of the Nature Study Tips.

Application for Annual Membership

Membership in the American Nature Study Society includes a membership card, a quarterly NEWSLETTER and the magazines you select. Please note you can get your membership for less than \$3.00, even free, by selecting the proper group.

Group Cost Publications Received (All include ANSS Newsletter and Nature Study Tips)

1. \$3.00	Membership only
2. 4.00	Membership with Cornell Science Leaflet (4 issues)
3. 5.50	Membership with Canadian Audubon Magazine (5 issues)
4. 6.50	Membership with Cornell Science Leaflet and Canadian Audubon
5. 7.00	Membership with Natural History
6. 8.00	Membership with Cornell Science Leaflet and Natural History
7. 9.50	Membership with Canadian Audubon and Natural History
8. 10.00	Membership with Canadian Nature, Natural History, Cornell Science Leaflet
F.	For Family Membership, add \$1.50 to the cost of group selected. Circle group desired, send application with name and address and check to:

Mrs. Mildred Rulison, Treasurer
754 Greenview Place
Lake Forest, Illinois

AMERICAN NATURE STUDY SOCIETY
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Kalamazoo, Michigan

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